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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,342	07/14/2001	Markus Schmall	62434/RFJ/PT	3761

7590 11/16/2004

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EXAMINER	
NORRIS, TREMAYNE M	

ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/905,342	SCHMALL ET AL.	
	Examiner	Art Unit	
	Tremayne M. Norris	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 12 is objected to because of the following informalities: There are two claims with the reference number "12." Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

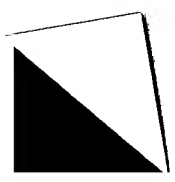
> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nachenberg (US pat 5,826,013).

Regarding claim 1, Nachenberg teaches a method of detecting a class of viral code, comprising:

heuristically analyzing a subject file to generate a set of flags along with statistical information (col.3 lines 37-53);

using the set of flags with statistical information to perform at least one search for a scan string and/or a statement type in the subject file (col.3 lines 37-53; col.11 lines 3-22); and



triggering a positive detection alarm if each of the at least one search is found at least a corresponding predetermined number of times (col.3 lines 44-46).

Regarding claim 2, Nachenberg teaches the subject file includes source code in a predetermined programming language (col.3 lines 17-35).

Regarding claim 3, Nachenberg teaches the predetermined programming language is a script language (col.5 lines 11-50).

Regarding claim 4, Nachenberg teaches the subject file includes a file for a predetermined word processor (col.11 lines 35-53).

Regarding claim 5, Nachenberg teaches at least one flag in the set of flags corresponds to a copy operation associated with one of the lass of viral code (col.1 lines 18-24l; col.3 lines 37-53).

Regarding claim 6, Nachenberg teaches at least one flag in the set of flags corresponds to an operation for adding data from a string to a target module (col.5 lines 11-50).

Regarding claim 7, Nachenberg teaches at least one flag in the set of flags corresponds to an operation for importing another code (col.3 lines 37-53).

Regarding claim 8, Nachenberg teaches at least one flag in the set of flags corresponds to an operation for disabling virus protection features in a target application (col.5 lines 5-8).

Regarding claim 9, Nachenberg teaches the searched statement type corresponds to an operation for disabling functionalities in a target application (col.4 line 66 thru col.5 line 10).

Regarding claim 10 (claim 12 as written), Nachenberg teaches the searched statement type corresponds to an operation for overwriting system macros (col.4 lines 3-14).

Claim 11 is a program storage device claim that is substantially equivalent to method claim 1, therefore claim 11 is rejected for the same reasons.

Claim 12 is a system claim that is substantially equivalent to method claim 1, therefore claim 12 is rejected for the same reasons.

Claim 13 is a computer data signal claim that is substantially equivalent to method claim 1, therefore claim 13 is rejected for the same reasons.

Claim 14 is an apparatus claim that is substantially equivalent to method claim 1, therefore claim 14 is rejected for the same reasons.

Regarding claim 15, Nachenberg teaches the heuristic analyzer is rule-based and comprises a heuristic engine and heuristic rules (col.1 lines 63-67; col.10 lines 28-43).

Regarding claim 16, Nachenberg teaches the heuristics engine, using the heuristic rules, parses the subject file (col.1 lines 63-67; col.3 lines 1-24; col.10 lines 28-43).

Regarding claim 17, Nachenberg teaches the heuristic rules include sets of heuristic flags stored in a rules table (col.3 lines 9-23).

Regarding claim 18, Nachenberg teaches the search component is rule-based and comprises a search engine and viral code class rules (col.3 lines 1-23; col.4 lines 23-41).

Regarding claim 19, Nachenberg teaches the search component is a neural network (fig.2; col.6 line 41 thru col.7 line 8).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tremayne M. Norris whose telephone number is (571) 272-3874. The examiner can normally be reached on M-F 7:30AM-5:00PM alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tremayne Norris

November 8, 2004

Andrew Caldwell

Andrew Caldwell